Vascular Plants of Williamson County Sisymbrium officinale – HEDGE MUSTARD [Brassicaceae]

Sisymbrium officinale L., HEDGE MUSTARD. Annual, taprooted, rosetted, 1-stemmed at base, unbranched or with flowering branches in upper canopy, ascending to erect, 30– 60(-150) cm tall; shoots with basal leaves and cauline leaves, basal leaves often not withered at anthesis, hirsute and short-hirsute to short-villous, the hairs unbranched, some noticeably thicker. Stems: low-ridged, to 5.5 mm diameter, typically with 8 ridges, each descending from a leaf, tough, deep purple at plant base. Leaves: helically alternate, deeply pinnately lobed with 3–7 distinct lobes separated by wide sinuses, petiolate and never clasping, without stipules; petiole \pm hemi-cylindric, to 25 mm long decreasing upward, appearing channeled because narrowly winged on upperside forming inrolled margins, upper side and midvein often purplish + purple often at node; blade oblong to obovate or broadly ovate (3-lobed) in outline, to $120 \times 30-115$ mm, of basal and lower cauline leaves the terminal lobe broadly ovate to ovate, to 55 mm wide, lateral lobes typically alternate and ovate to lanceolate (basal lobes), decreasing in size toward the base, lobes mostly with coarse, rounded teeth, of upper cauline leaves terminal lobe ovate to lanceolate to 70 mm long, lateral lobes mostly opposite and lanceolate to oblong-elliptic but often entire or with inconspicuous teeth, pinnately veined with principal veins sunken on upper surface and raised on lower surface, dull, hirsute with scattered, stiff, straight hairs. Inflorescence: raceme or panicle of racemes, terminal on main and lateral shoots, many-flowered, < 10 mm wide at top, \pm flat-topped with open flowers overtopping buds, short-hirsute (hirtellous) with downward-appressed hairs; bract subtending raceme leaflike; peduncle and rachis low-ridged, the ridges descending from pedicels, having the widest hairs along ridges; bractlets absent; pedicel ascending, at anthesis 1.5–2 mm long increasing $2 \times$ in fruit, short-hirsute, remaining green. Flower: bisexual, radial, 3-4 mm across; sepals 4, erect, slightly dimorphic, $2.2-2.4 \times 0.8-1.5$ mm, outer sepals > inner sepals, oblong-elliptic, blunt-hooded but not distinctly horned, inner 2 sepals narrowly ovate and not hooded, green with conspicuous membranous margins and tips, 3-veined, sparsely villous; petals 4, clawed, spatulate, 2.8–3.2 mm long, claw nearly to midpoint, yellowish aging greenish, limb spreading to ascending, $1.4-1.8 \times 1$ mm, light yellow, longtapered at base, pinnately veined, the veins orangish; stamens 6, free, dimorphic, outer 2 short and inner 4 longer; filaments erect, $\pm 2 \text{ mm long}$ (outer stamens) and $\pm 2.5 \text{ mm long}$ (inner stamens), increasing slightly with age, transparent; anthers dorsifixed, dithecal, 0.6 mm long, dull yellow aging green, arrow-shaped at base, longitudinally dehiscent; pollen light yellow; nectaries 4, around bases of stamens, domelike, green, producing copious thin nectar; **pistil** 1, at anthesis 2.5 mm long, with stigma at level of long stamen anthers; ovary superior, compressed-lanceoloid, 2 mm long, greenish aging purplish red, 3-veined on each valve, with some hairs just below style, 2-chambered, each chamber with many ovules; style ± 0.5 mm long; stigma capitate, 2-lobed, green. Fruit: siliqua (silique), dehiscent by 2 valves parallel to septum, to 15-seeded, erect to somewhat appessed, linear with beak, $9-17 \times 1-1.3$ mm, greenish or aging purplish red, slightly tapered to tip, shorthirsute, in each chamber seeds in 1 row; beak 1.3-3 mm long. Seed: flattened obovoid, 1.3–1.5 mm long, dull orange-red, often somewhat contorted to inrolled. A. C. Gibson & B. A. Prigge